

Four Proposed LOPOMO Appliance Standards for the 2003-2004 Appliance Rulemaking

Audio and Video Consumer Electronics

Television Set-Top Boxes

External Power Supplies

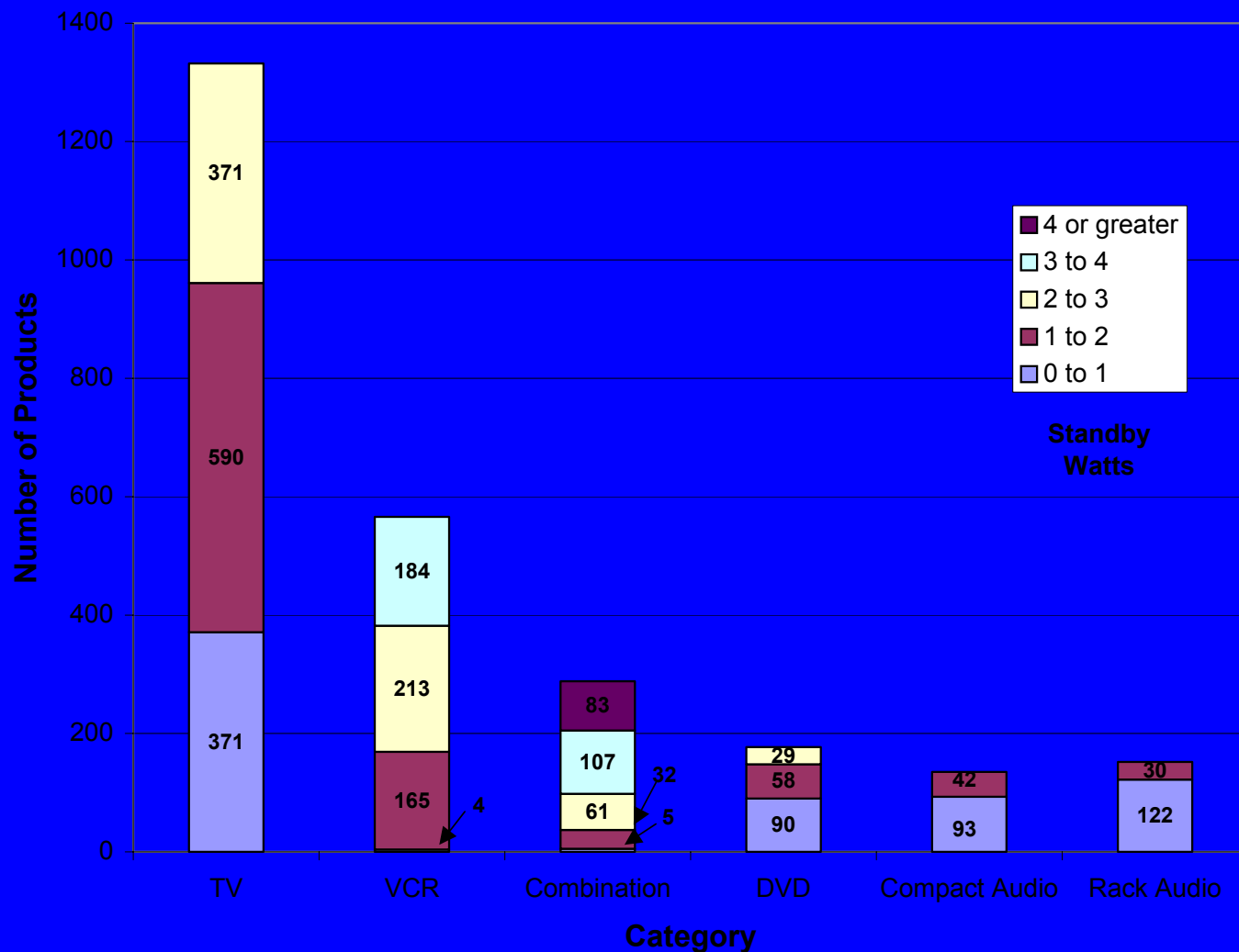
Battery Chargers

Audio and Video Consumer Electronics

- ~90 Million in California:
 - Video: TV, VCR, DVD, etc...
 - Audio: Rack, Compact, CD, etc...
- Currently ~2-10 Watts average standby
- Test method: IEC 62301
- Standard: 2-4 W depending on type



Energy Star Listed Products



Television Set-Top Boxes

- Currently ~10 Million in California:
 - Integrated Receiver Decoders: Cable, Satellite
 - Converters: Digital, HDTV
- Currently ~10-23 Watts standby
- Test method: IEC 62301
- Standard: Energy Star Tier I



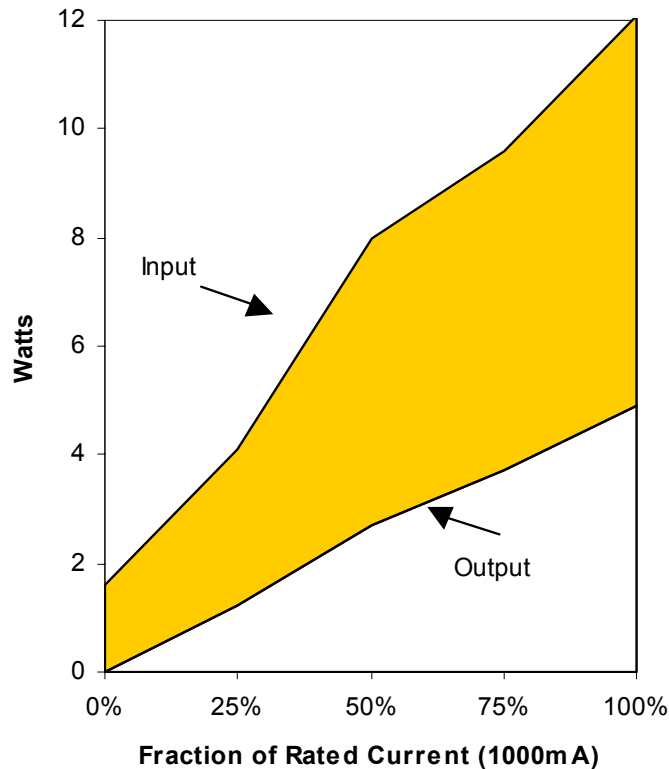
External Power Supplies

- ~100 Million in California
- PIER developing test method
- Linear power supplies are 20-60% efficient
- Standard: 75% efficiency and 0.75W standby

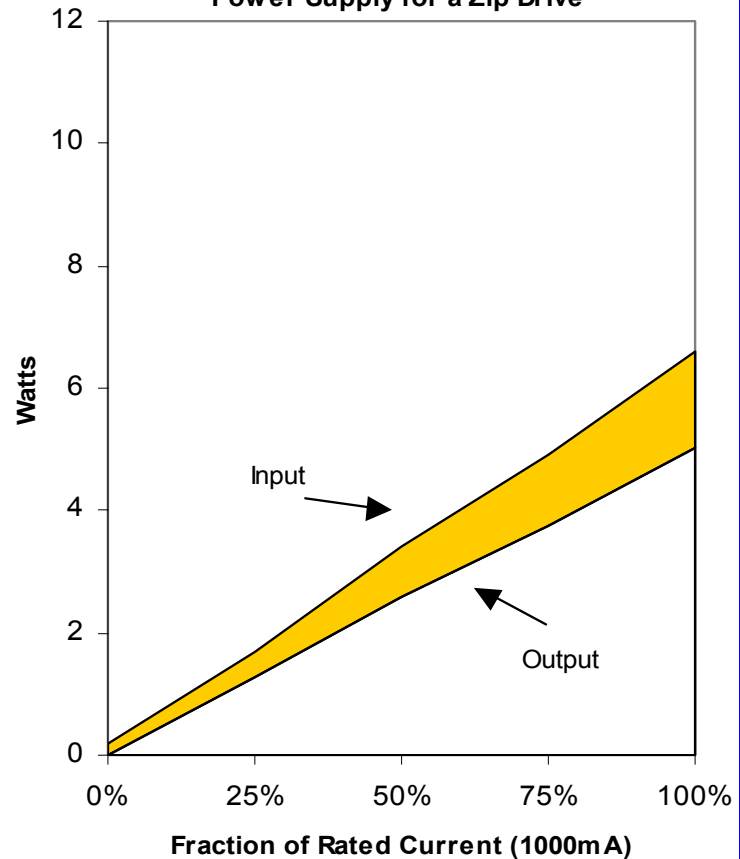


Linear and Switching Power Supply Comparison

Power Consumed by a 5 Volt Linear Power Supply for a Zip Drive



Power Consumed by a 5 Volt Switching Power Supply for a Zip Drive





Battery Chargers



- ~44 Million in California
- Draft test method being circulated
- Regulate both Standby and Idle power use
- Standby: Avg 0.6 - 1.8W, Max 3.7W
- Idle: Avg 1.6 - 4.6W, Max 21.4W

Range of Idle Mode Power

